

REMARKS

Claims 1, 4, 6-13, 16-18 and 21-31 are pending in this application. By this Amendment, claims 1, 4, 6, 7, 12, 13, 17 and 18 are amended, claims 2, 3, 5, 14, 15, 19 and 20 are canceled and claims 22-31 are added. In particular, allowable claims 4 and 7 have been amended into independent form and the allowable features of claims 4 and 7 have been variably incorporated into claims 12, 13, 17 and 18. Support for the amended features of claim 1 can be found in paragraphs [0086], [0102], [0105] and [0106]. Claims 26, 29 and 31 includes features similar to original claims 1, 12 and 17 with a modified claim 4 and claims 28 and 30 include features similar to amended claim 1. Figs. 8 and 9A-9C are amended.

Applicant appreciates the indication of allowable subject matter in claims 4 and 7-9. By this Amendment, the claims have been amended as discussed above. For the reasons discussed below, it is believed that all of claims 1, 4, 6, 13, 16-18 and 21-31 are allowable.

The drawings were objected to based on various informalities. By this Amendment, Applicant resubmits original Fig. 3. It is believed that reference numerals 2 and 3 were inadvertently removed when the application file was scanned. The features identified by reference numerals 2 and 3 do not appear in Fig. 2. Applicant also amends claim 8 to correct a misspelling and amends Figs. 9A-9C in order to add a legend as suggested in the Office Action. It is respectfully requested that the objection be withdrawn.

Claims 4 and 9 were objected to based on various informalities. By this Amendment, claim 4 has been amended into independent form. Applicant asserts that claim 7 provides antecedent basis for the first product and the second product of claim 9 (see page 5, lines 9 and 13 of this Amendment). It is respectfully requested that the objection be withdrawn.

Claims 7-9 were rejected under 35 U.S.C. §112, second paragraph based on various informalities. By this Amendment, claim 7 has been amended to recite a unit error as

correctly assumed by the Examiner. Applicant also asserts that proper antecedent basis is provided in claim 7 (see page 5, lines 9 and 14 of this Amendment) for the first and second integers of claim 9. It is respectfully requested that the rejection be withdrawn.

Claims 1, 2, 11-13, 16-18 and 21 were rejected under 35 U.S.C. §102(b) and claims 3, 14 and 19 were rejected under 35 U.S.C. §103(a) over EP 1 195 248 (EP'248). The rejection of claims 2, 3, 14 and 19 has been rendered moot by the cancellation of claims 2, 3, 14 and 19. It is also asserted that the rejection of claims 12, 13, 16-18 and 21 has been rendered moot by incorporating the allowable features of claims 4 and 7 into claims 12, 13, 17 and 18. The rejection of claims 1 and 11, as well as any future rejection of claims 28 and 30, is respectively traversed.

EP '248 fails to disclose a serial recording apparatus with a memory in which at least one of (a) and (b) is stored and a control device which controls based on the at least one of (a) and (b), as recited in claim 1 and as similarly recited in claims 28 and 30.

EP '248 discloses an ink-jet recorder with a print head 22 having an image forming area 23 and a paper feed roller 24 (Fig. 1). As shown in Figs. 3-7, a method of detecting a nozzle width of the print head 22 and an actual feed of a recording paper is performed by using adjustment charts, as shown in Fig. 5, and a photosensor 6, as shown in Fig. 2 (paragraphs [0026] and [0027]). As such, EP '248 must use a photosensor 6 and operate the print head 22 based on the adjustment charts of Fig. 5 for the purpose of detecting the nozzle width of the print head 22 and the actual feed of the recording paper.

The memory and control device of claim 1 are thus advantageous over EP'248 because a photosensor and adjustment charts are not required. In other words, EP '248 fails to disclose a memory in which at least one of (a) first information representing a length of the array of recording elements in the feeding direction which length contains a manufacturing error of the array of recording elements and (b) second information representing a diameter of

the feeding roller which diameter contains a manufacturing error of the feeding roller is stored. As should be appreciated, the at least one of (a) and (b) is stored during manufacturing. By storing the information in the memory during manufacturing, the serial recording apparatus does not require a photosensor 6 nor operate a recording head to record adjustment charts on the recording paper. EP '248 teaches away from employing the memory or the control device as recited in claim 1 because EP '248's device is designed to detect automatically the nozzle width of the print head 22 and the actual feed of the recording paper.

Accordingly, EP '248 fails to disclose all of the features recited in claim 1 as well as the additional features recited in the dependent claims. It is respectfully requested that the rejections be withdrawn.

EP'248 also fails to disclose all of the features recited in claims 26, 29 and 31 because EP'248 fails to obtain information representing a sort of the recording mediums or perform a control based on the sort.

Claims 5, 6, 15 and 20 were rejected under 35 U.S.C. §103(a) over EP '248 in view of JP 07-314838 (JP '838) and claim 10 was rejected under 35 U.S.C. §103(a) over EP '248 in view of Martin, U.S. Patent No. 4,097,873. The rejections are respectfully traversed.

JP '838 and Martin fail to overcome the deficiencies of EP '248 in disclosing or suggesting all the features recited in claim 1 as well as the additional features recited in claim 10. Claim 6 depends from allowable claim 7 and claims 5, 15 and 20 are cancelled. It is respectfully requested the rejections be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 4, 6-13, 16-18 and 21-31 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachments:

Amendment Transmittal
Figs. 3, 8 and 9A-9C

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Amendments to the Drawings:

The attached replacement drawing sheets makes changes to Figs. 8 and 9A-9C and replaces the original sheets with Figs. 8 and 9A-9C. The attached replacement drawing sheet re-submits Fig. 3 without making changes to Fig. 3 and replaces the original sheet with Fig. 3.

Attachment: Replacement Sheets